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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,060

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Eric R. Blomiley

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EXAMINER

MOORE, KARLA A

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

07/07/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/822,060	<b>Applicant(s)</b> BLOMILEY ET AL.	
	<b>Examiner</b> KARLA MOORE	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 79-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 79-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0309</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 79-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) (Figures 1-4 and paragraphs 2-9 of specification) in view of U.S. Patent No. 5,467,259 to Hume et al.

4. Regarding claim 79, AAPA discloses a semiconductor fabrication apparatus substantially as claimed and comprising: a substrate support (e.g. Figure 3, 12) assembly configured to support a substrate (14) for fabrication; a plurality of lamps (e.g. Figure 3, 18 and 22) positioned proximate a substrate; and a plurality of reflectors (30)

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that do not extend below associated with the lamps, individual ones of the reflectors being associated with individual ones of the lamps, wherein at least a portion of the lamps are positioned between the reflectors and the substrate support assembly.

5. However, AAPA fails to teach the reflectors having a rugged, reflective surface.

6. Hume et al. teach providing a lamp with a rugged (i.e. multi-faceted), reflective surface for the purpose of designing a light source capable of directing light precisely, permitting highlighting and profiling and a well controlled beam of light and also for the purpose of allowing most of the heat from the light to pass backwards through the reflector whilst directing the beam forwards (column 1, rows 9-12 and column 2, rows 3-14).

7. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided reflectors having a rugged, reflective surface in AAPA in order to design a light source capable of directing light precisely, permitting highlighting and profiling and a well controlled beam of light and also in order to allow most of the heat from the light to pass backwards through the reflector whilst directing the beam forwards as taught by Hume et al.

8. With respect to claims 80-82, in Figure 3 of AAPA, the lamps have a convex surface and the reflectors have a complimentary concave surface.

9. With respect to claims 83 and 84, Hume et al. teach providing the rugged reflective surface of the reflectors as a repeating honeycomb pattern. See Figures 1-3 and column 2, rows 3-14.

10. With respect to claim 85, in Figure 3 of AAPA, at least four lamps are associated with at least four reflectors.

11. With respect to claim 86, in Figure 2 of AAPA, it is disclosed that the plurality of lamps are positioned on opposing sides of the substrate.

12. With respect to claim 87, in Figures 2 and 3 of AAPA, it is disclosed how one opposing side of the substrate can be supported by a susceptor and a portion of the plurality of lamps can be positioned between the susceptor and a portion of the plurality of reflectors.

13. With respect to claim 88, in Figure 3 of AAPA, the plurality of lamps are comprised by both outer (18) and inner (22) lamps.

14. With respect to claim 89, in Figure 3 of AAPA, an entirety of the lamps reside below the reflectors.

15. With respect to claim 90, in Hume et al., while an interior surface facing the light source is patterned, an exterior surface is plain, smooth and unpatterned.

### ***Response to Arguments***

16. In response to Applicant's argument that Applicant has a different rationale for providing the structure of the prior art as part of the claimed apparatus, it is noted that the fact that Applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Additionally, Examiner notes that the prior art features of

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“directing light precisely” and “a well controlled beam of light” could refer to general conditions of the light (as in, “the light is directed precisely as intended” or “the beam of light is controlled as desired with accuracy”), rather than a how and/or where a light is specifically directed.

### ***Conclusion***

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARLA MOORE whose telephone number is (571)272-1440. The examiner can normally be reached on Monday-Friday, 9:00 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karla Moore/  
Primary Examiner, Art Unit 1792